Preliminary

Water Quality Management Plan

For:

STIRLING – SCLA LOT 19

Prepared for:

Stirling Capital Investment / Lot 19, LLC

27422 Portola Parkway, Suite 300

Foothill Ranch, CA 92610

949-462-0909

Prepared by:

Huitt-Zollars, Inc

3990 Concours, Suite 330

Ontario, CA 91764

909-941-7799

Comments
AJL
8/31/17

Project: R307180.01

Submittal Date: 05/02/2017

Approval Date:_____

please use Mojave River watershed wamp document found on Cnty website.

Project Owner's Certification

This Water Quality Management Plan (WQMP) has been prepared for Stirling Development by Huitt-Zollars, Inc.. The WQMP is intended to comply with the requirements of the County of San Bernardino and the NPDES Area wide Stormwater Program requiring the preparation of a WQMP. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County's Municipal Storm Water Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

Project Data			
Permit/Application Number(s):	TBD	Grading Permit Number(s):	TBD
Tract/Parcel Map Number(s):	TBD	Building Permit Number(s):	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			TBD

Owner's Signature			
Owner Name: Jason Huber			
Title	Project Manager		
Company	Stirling Development		
Address	27422 Portola Parkway, Suite 300, Foothill Ranch, CA 92610		
Email	JMHuber@stirlingdevelopment.com		
Telephone #	949-588-2270		
Signature		Date	

Preparer's Certification

Project Data			
Permit/Application Number(s):	TBD	Grading Permit Number(s):	TBD
Tract/Parcel Map Number(s):	TBD	Building Permit Number(s):	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			TBD

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan were prepared under my oversight and meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0036."

Engineer: Manny Gonzales		PE Stamp Below
Title	Project Manager	
Company	Huitt-Zollars, Inc	
Address	3990 Concours, Suite 330 Ontario, CA 91764	
Email	mgonzales@huitt-zollars.com	
Telephone #	909-941-7799	
Signature		
Date		

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Section 1 Discretionary Permit(s)

Form 1-1 Project Information

Project Name	STIRLING – SCLA LOT 19				
Project Owner Contact Name:	Jason Huber				
Mailing Address:	27422 Portola Parkway, Suite 300, Foothill Ranch, CA 92610	E-mail Address:	JMHuber@stirlingdevelopment.com	Telephone:	949-588-2270
Permit/Application Number(s):	TBD		Tract/Parcel Map Number(s):	TBD	
Additional Information/ Comments:	N/A				
Description of Project:	The project is a new development of an industrial warehouse facility located on the southwest corner of Phantom West and Nevada Avenue, within the George Airforce Base area in City of Victorville, California. The proposed building is approximately 974,540 square feet in size on approximately 44.7 acres of vacant land and will require a WQMP. All on-site runoff will be collected by catch basins and conveyed to the infiltration/detention basin on the north side of the project site for treatment. The design captured volume will infiltrate through the bottom of the basin. Higher volumes will discharge through a proposed 4'x3' outlet structure. Said structure connects to an existing catch basin in Phantom West that discharges across the street to an existing earthen channel/ditch.				
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.	N/A				

Please place on-site ~~description~~ here and reference Hydrology Study

Section 2 Project Description

2.1 Project Information

This section of the WQMP should provide the information listed below. The information provided for Conceptual/ Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

Form 2.1-1 Description of Proposed Project

1 Development Category (Select all that apply):

☐ Significant re-development involving the addition or replacement of 5,000 ft² or more of impervious surface on an already developed site	☒ New development involving the creation of 10,000 ft² or more of impervious surface collectively over entire site	☐ Automotive repair shops with standard industrial classification (SIC) codes 5013, 5014, 5541, 7532- 7534, 7536-7539	☐ Restaurants (with SIC code 5812) where the land area of development is 5,000 ft² or more
☐ Hillside developments of 5,000 ft² or more which are located on areas with known erosive soil conditions or where the natural slope is 25 percent or more	☐ Developments of 2,500 ft² of impervious surface or more adjacent to (within 200 ft) or discharging directly into environmentally sensitive areas or waterbodies listed on the CWA Section 303(d) list of impaired waters.	☐ Parking lots of 5,000 ft² or more exposed to storm water	☐ Retail gasoline outlets that are either 5,000 ft² or more, or have a projected average daily traffic of 100 or more vehicles per day

☐ Non-Priority / Non-Category Project *May require source control LID BMPs and other LIP requirements. Please consult with local jurisdiction on specific requirements.*

2 Project Area (ft2):	1,950,646	**3** Number of Dwelling Units:	N/A	**4** SIC Code:	1541

5 Is Project going to be phased? Yes ☐ No ☒ *If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.*

6 Does Project include roads? Yes ☐ No ☒ *If yes, ensure that applicable requirements for transportation projects are addressed (see Appendix A of TGD for WQMP)*

2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.

Form 2.2-1 Property Ownership/Management

Describe property ownership/management responsible for long-term maintenance of WQMP stormwater facilities:

The property is being developed by Stirling Development. Stirling Development will be the entity responsible for long term maintenance of WQMP Storm Water Facilities throughout the site.

Name: Stirling Development

Address: 27422 Portola Parkway, Suite 300, Foothill Ranch, CA 92610

Contact Person: Jason Huber/ Project Engineer

Phone: 949-588-2270

2.3 Potential Stormwater Pollutants

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-3 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern

Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments
Pathogens (Bacterial / Virus)	E ☒	N ☐	Pathogens are typically caused by the transport of animal or human fecal wastes from the watershed.
Nutrients - Phosphorous	E ☒	N ☐	Primary sources of nutrients in urban runoff are fertilizers and eroded soils.
Nutrients - Nitrogen	E ☒	N ☐	Primary sources of nutrients in urban runoff are fertilizers and eroded soils.
Noxious Aquatic Plants	E ☒	N ☐	Noxious aquatic plants are typically from animals or vehicle transport that grow aggressively, multiply quickly without natural controls (native herbivores, soil chemistry, etc.), and adversely affect native habitats.
Sediment	E ☒	N ☐	Sediments are solid materials that are eroded from the land surface.
Metals	E ☒	N ☐	The primary source of metal pollution in stormwater is typically commercially available metals and metal products, as well as emissions from brake pad and tire tread wear associated with driving.
Oil and Grease	E ☒	N ☐	Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids.
Trash/Debris	E ☒	N ☐	Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste from human or animals.
Pesticides / Herbicides	E ☒	N ☐	Pesticides and herbicides can be washed off urban landscapes during storm events.
Organic Compounds	E ☒	N ☐	Sources of organic compounds may include waste handling areas and vehicle or landscape maintenance areas.
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	

2.4 Water Quality Credits

A water quality credit program is applicable for certain types of development projects if it is not feasible to meet the requirements for on-site LID. Proponents for eligible projects, as described below, can apply for water quality credits that would reduce project obligations for selecting and sizing other treatment BMP or participating in other alternative compliance programs. Refer to Section 6.2 in the TGD for WQMP to determine if water quality credits are applicable for the project.

Form 2.4-1 Water Quality Credits - N/A

[1] Project Types that Qualify for Water Quality Credits: *Select all that apply*

☐ Redevelopment projects that reduce the overall impervious footprint of the project site. [Credit = % impervious reduced]	Higher density development projects ☐ Vertical density [20%] ☐ 7 units/ acre [5%]	☐ Mixed use development, (combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that demonstrate environmental benefits not realized through single use projects) [20%]	☐ Brownfield redevelopment (redevelop real property complicated by presence or potential of hazardous contaminants) [25%]
☐ Redevelopment projects in established historic district, historic preservation area, or similar significant core city center areas [10%]	☐ Transit-oriented developments (mixed use residential or commercial area designed to maximize access to public transportation) [20%]	☐ In-fill projects (conversion of empty lots & other underused spaces < 5 acres, substantially surrounded by urban land uses, into more beneficially used spaces, such as residential or commercial areas) [10%]	☐ Live-Work developments (variety of developments designed to support residential and vocational needs) [20%]
[2] Total Credit % 0 *(Total all credit percentages up to a maximum allowable credit of 50 percent)*			
Description of Water Quality Credit Eligibility (if applicable)	NOT APPLICABLE		

Section 3 Site and Watershed Description

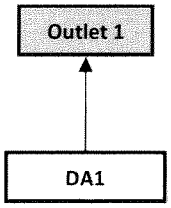
Describe the project site conditions that will facilitate the selection of BMP through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed DMAs) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example. Then complete Forms 3.2 and 3.3 for each DA on the project site. ***If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet.***

Form 3-1 Site Location and Hydrologic Features

Site coordinates *take GPS measurement at approximate center of site*	Latitude 34°35'19.00"N	Longitude 117°22'02.00"W	Thomas Bros Map page 4205

[1] San Bernardino County climatic region: ☒ Valley ☐ Mountain Desert

[2] Does the site have more than one drainage area (DA): Yes☐ No☒ *If no, proceed to Form 3-2. If yes, then use this form to show a conceptual schematic describing DMAs and hydrologic feature connecting DMAs to the site outlet(s). An example is provided below that can be modified for proposed project or a drawing clearly showing DMA and flow routing may be attached*



If there are multiple DA's across the site that need to be accounted for.

Conveyance	Briefly describe on-site drainage features to convey runoff that is not retained within a DMA
DA1 to Outlet 1	Runoff from the project site will be directed to the proposed infiltration/ detention basin on the north side of the project site. Higher volumes will discharge through a proposed 4'x3' outlet structure. Said structure connects to an existing catch basin in Phantom West that discharges across the street to an existing earthen channel/ditch on the northerly side of Phantom West.
DA1 DMA B to Outlet 1	N/A
DA2 to Outlet 2	N/A

Form 3-2 Existing Hydrologic Characteristics for Drainage Area 1

For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DMA A	DMA B	DMA C	DMA D
1 DMA drainage area (ft^2)	1,950,646	N/A	N/A	N/A
2 Existing site impervious area (ft^2)	1,950,646	N/A	N/A	N/A
3 Antecedent moisture condition *For desert areas, use* http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_map.pdf	AMC I	N/A	N/A	N/A
4 Hydrologic soil group *Refer to Watershed Mapping Tool* – http://permitrack.sbcounty.gov/wap/	C	N/A	N/A	N/A
5 Longest flowpath length (ft)	2,580	N/A	N/A	N/A
6 Longest flowpath slope (ft/ft)	~0.0056	N/A	N/A	N/A
7 Current land cover type(s) *Select from Fig C-3 of Hydrology Manual*	Barren	N/A	N/A	N/A
8 Pre-developed pervious area condition: *Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating*	Poor	N/A	N/A	N/A

* please include all DMA's as shown in Hydrology Study